



In the United States Patent and Trademark Office

Serial No. 10/670,633	§	Filing Date: 09/25/2003
	§	
Title: FEMORAL BROACH WITH UNDERCUT TEETH	§	Examiner: pending
	§	
Applicant : WHITE	§	GA No.: pending
	§	
Atty docket no: 1.P566.35		

INFORMATION DISCLOSURE STATEMENT

To:

Mail Stop DD
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to the provisions of 37 C.F.R. §1.97, Applicant encloses the references set forth in the attached modified form PTO/SB/O8A. No inference should be made that the cited references are in fact material, are in fact prior art, or that no better art exists. The cited patents are listed in numerical order and not in any order based on their pertinence.

It is requested that the Examiner fully consider the cited references and that they be cited on the front of any patent issuing from this application.

Copies of the cited references are attached.

German patent No 298 16 064 – Rasp, in particular for excavating bone cavities and for adapting them to hollow shaft prostheses to be implanted in said bone cavities

Claims:

1. A rasp for adapting a bone cavity to a hollow shaft prosthesis to be implanted in said bone cavity, said rasp having a pyramid-shaped or truncated cone-shaped basic form, characterized by the following features:
 - a) the basic form (1) of the rasp has a multiplicity of steps (1a) arranged in a stair formation and with sharp cutting edges (1b) which extend transversely with respect to the working direction (B) and whose outer contour corresponds to the contour of the hollow shaft prosthesis;
 - b) gaps (1c) are let into the steps (1a) in order to form individual teeth (1d).
2. The rasp as claimed in claim 1, wherein the gaps (1c) and the teeth (1d) are staggered in relation to one another from step to step along the working direction (B).
3. The rasp as claimed in claim 1 or 2, wherein the steps (1a) are cut out from the basic form (1) by means of wire erosion.
4. The rasp as claimed in claim 1 or 2, wherein the gaps (1c) are worked into the steps (1a) by means of end-milling cutters.

Rasp, in particular for excavating bone cavities and for adapting them to hollow shaft prostheses to be implanted in said bone cavities

The innovation concerns a rasp in accordance with the preamble of claim 1. Such rasps are needed in surgery in order to excavate the bone so that the hollow shaft prosthesis to be implanted sits free from play; i.e. the contour of the bone cavity is to be adapted as precisely as possible to the contour of the prosthesis. With the rasps used hitherto, maintaining the strict precision, demanded for medical reasons, in the adaptation of the bone cavity to the prosthesis has been made difficult by the fact that the so-called “pocks” of the rasp are forced open with a chisel. This can lead to irregularities in respect of the pock heights.

The object of the innovation is to improve a rasp of the generic type in such a way as to achieve a high degree of dimensional accuracy and shape accuracy of its outer contour which is to be adapted to a given prosthesis.

To achieve this object, the structural measures set out in the characterizing part of claim 1 are proposed. The subclaims referring back to claim 1 specify advantageous embodiments of and refinements to this solution.

An illustrative embodiment of the innovation is explained below with reference to the drawings:

Figure 1 shows the rasp with toothing according to the innovation;

Figure 2 shows the prosthesis matching the rasp.

The rasp made of high-strength stainless steel according to Figure 1 has a pyramid-shaped basic form 1 with a handgrip 2 arranged thereon. Wire erosion is carried out to cut a multiplicity of steps 1a arranged in a stair formation into this basic form, with sharp cutting edges 1b which extend transversely with respect to the working direction B and whose outer contour corresponds to the contour of the hollow shaft prosthesis according to Figure 2. An end-milling cutter is used to sink gaps 1c

into these steps in order to form individual teeth 1d. As can also be seen from Figure 1, the teeth 1d and the gaps 1c lying between them are staggered relative to one another from step to step along the working direction B. Instead of this, however, it is also possible to arrange the teeth and gaps in such a way that, when excavating the bone, any ribs present on the prosthesis, as are visible in Figure 2, are taken into account. In any case, the teeth have a precise, predeterminable position and shape, permitting exact adaptation of the bone cavity to the prosthesis which is to be implanted.

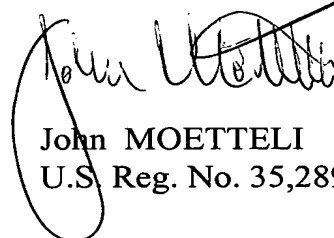
List of reference symbols

- 1 basic form
- 1a steps
- 1b cutting edges
- 1c gaps
- 1d teeth
- 2 handgrip
- B working direction

An early action on the merits is respectfully requested.

If the Examiner has further questions, he is invited to contact the undersigned at phone 011-4122-346-8744 or fax at 011-4122-346-8960.

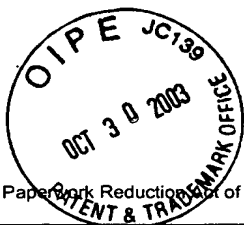
Respectfully submitted,



John MOETTELI
U.S. Reg. No. 35,289

Date: Oct 28, 2003

Enclosures: IDS form
copies of cited patents



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Approved for use through 07/31/2006. OMB 0651-0031

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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/670,633
				Filing Date	09/25/2003
				First Named Inventor	WHITE
				Art Unit	
				Examiner Name	
Sheet	1	of	2	Attorney Docket Number	1.P566.35

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US-5,041,118	08-20-1991	Implant Technology	Col. 4, line 35 – 50, Fig. 10
	2	US-5,342,365	08-30-1994	J.N. Waldman	Col. 2, line 34 – 61, Fig. 5
	3	US-5,665,091	09-09-1997	P.C. Noble et al	Col. 6, line 6 – col. 7, line 67, figs 6A, 7A, 8A, 9A
	4	US-5,006,121	04-09-1991	P.B. Hafeli	Col. 3, line 45 – 50, col. 4, line 15 - 23
	5	US-5,897,558	04-27-1999	A.S. Frieze et al	Col. 4, line 52 - 54
	6	US- 6,319,256	11-20-2001	Sulzer Orthopedics	Corresponds to patent EP 1033108
	7	US- 4,872,452	10-10-1989	Minnesota Mining	Corresponds to patent EP 0378002
		US			
		US			
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FOREIGN PATENT DOCUMENTS					
Examiner Initials	Cite No	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	8	EP 0 733 343	09-25-1996	Kessel Werk.	Figs 1,2
	9	FR 2 722 391	01-19-1996	Landanger Landos	Page 7, line 16 – 33, fig. 3
	10	EP 1 033 108	09-06-2000	Sulzer Orthop.	Col. 3, line 6 – 17, figs 2-4
	11	DE 27 32 325	01-18-1979	Gebr. Sulzer	Page 8, line 15 – 20, fig. 4
	12	DE 298 16 064	11-5-1998	Forschungszent.	Page 3, line 32 – page 4, line 2
	13	EP 0 378 002	07-18-1990	Minnesota Mining	Col. 2, line 13 – 14, col. 3, line 46 – 53
	14	WO 01 08571	02-08-2001	Disc-O-Tech	Page 12, line 27 - 29

Examiner Signature		Date Considered	
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Sheet	2	of	2	Attorney Docket Number	1.P566.35

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published	
	15	Standard Search Report IN SN RS 109339	

Examiner Signature		Date Considered	
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